# The experience of using the Neurotic Personality Questionnaire KON-2006 in Russia

Piotr Krystian Trąbczyński, Galina L. Isurina, Irina V. Grandilevskaya

# Summary

The article presents the first application of the "Neurotic Personality Questionnaire KON-2006" method, developed by the Polish scientist J. Aleksandrowicz, in Russia. This study is approved by the Ethics Committee of St. Petersburg State University. At subsequent stages, the project was carried out with the financial support of the Russian Foundation for Basic Research (grant№ 17-06-00956). It describes the adaptation procedure of the questionnaire, and the results obtained from the study of his construct and convergent validity. The paper outlines the results of an empirical study, conducted with 423 participants (201 patients with neurotic disorders, and 222 healthy persons), which demonstrate the psychodiagnostic possibilities of the method. It shows that, in the Russian sample, "KON-2006" clearly demarcates the clinical group from the healthy group, revealing significant differences in almost all indicators. The questionnaire describes a wide range of personality traits (personality dysfunctions) inherent in patients with neurotic disorders, and reveals their high level of manifestation. Along with the "KON-2006", the present study also uses methods for studying the level of social frustration: the "Neurotic personality traits" questionnaire, the "Level of neuroticism" questionnaire, the Symptoms Check List - 90 method, for studying the severity of psychopathological symptoms, and a method for studying intrapersonal conflicts. Our study revealed the personality traits that show the highest correlation with clinically validated neurotic disorders. Based on these observations, an attempt was made to identify and describe certain "personality types" typical of patients with neurotic disorders. As a result, we have designed a methodical complex for the positive diagnosis of neurosis, which main tool is the "Neurotic Personality Questionnaire KON-2006".

neurotic disorder, positive diagnosis of neurotic disorders, neurotic conflict, social frustration, personality types

# INTRODUCTION

The definition of neurosis as a mental illness [1-9], which shows a clear connection, on the one hand, between a psycho-traumatic situation and personality traits, and on the other hand,

Correspondence address: skala.84@mail.ru

the genesis and progress of the disease, requires a thorough examination and analysis of all the components of the psychogenesis. In Russia, various theoretical approaches have been used in research on personality traits of patients with a neurotic disorder. Different questionnaires (MMPI, Cattell Questionnaire, Giesener Personality Questionnaire, Eysenk Personality Questionnaire), and projective techniques (TAT, Rosenzweig Frustration Test, Sentence Completion Methodology etc.) have been applied, resulting in the development of new adaptations

<sup>&</sup>lt;sup>1</sup>Piotr Krystian Trąbczyński, <sup>1</sup>Galina L. Isurina, <sup>1</sup>Irina V. Grandilevskaya: Department of Medical Psychology and Psychophysiology of Saint Petersburg State University, Department of Psychology, Russia

of existing methods in personality research [12-20]. Self-esteem and attitude to "the self" have been explored as well [21-26]. The conducted studies unraveled a wide range of individualpsychological and personality features characteristic to patients with neurotic disorders. However, in order to solve the tasks of practical psychological diagnosis it is not possible, based on these studies, to single out a more informative method, or to create a compact methodological complex, which would allow to quickly enough, specify and measure a wide range of personality traits of a neurotic register. In this context, the "Neurotic Personality Questionnaire KON-2006", developed in Poland by J. Aleksandrowicz, is of utmost interest because it allows specifying and measuring a wide range of personality traits of a neurotic register [27-29]. The present research's purpose is to adapt this methodology to a Russian sampling.

**Objective of the research.** The objective of the research is to study personality characteristics of patients with neurotic disorders and to define personal patterns adjacent to a clinically formed neurotic disease in connection with the tasks of positive neurotic diagnostics. A separate task was to adapt the methodology.

**Object of the research:** clinical-psychological and personality characteristics of patients with neurotic disorders.

**Subject of the research:** psychopathological symptomatology of a neurotic register; expression of personality dysfunctions; personality patterns, intrapersonal conflicts, social frustration level.

# Description of the sampling

423 people have been examined in total: 167 male (39.5%) and 256 female (60.5%). The whole sampling has been divided into two groups: an experimental group and a control group. The experimental group consists of 201 patients – 114 female (56.7%) and 87 male (43.3%) with a diagnosis of neurotic, related to stress and somatoform disorders. The control group is formed by 222 healthy persons – 142 female (63.9%) and 80 male (36.1%).

Most participants in the sampling are between 20 and 40 years old: 77.94% in the experimental group and 68.66% in the control group.

Table 1 presents more detailed description of the research group and the control group including demographic data.

Indicators		All group (N = 423)	Research group (N = 201)	Control group (N = 222)
Occupation	Students	39.5 %	32.33 %	45.95 %
	Employment	57.8 %	65.51 %	54.05 %
	No employment	2.7 %	2.16 %	-
Education	Higher education	25.3 %	34.33 %	17.12 %
	Continues to study	36.6 %	3.98 %	43.69 %
	Secondary education	38.1 %	32.84%	14.86 %
Family status	Married	34.5 %	35.83 %	33.34 %
	Single	54.1 %	51.24 %	56.75 %
	Divorced	11.1 %	12.44 %	9.91 %
	Widowed	0.3 %	0.49 %	-
Amount of children	Childless	58.2 %	52.74 %	63.06 %
	1 Child	25.8 %	24.38 %	27.04 %
	2 Children	14.2 %	19.9 %	9 %
	More than 2 children	1.8 %	2.98%	0.9 %

Table 1. Social and demografic characteristics of research and the control groups.

The criterion of inclusion to the experimental group is the presence of a clinically validated

neurotic disorder (F 4 diagnosis under ICD-10). In connection with the objectives of the research,

at the stage of data processing, the experimental sampling was divided into three subgroups, named:

- neurotic disorder (F 40; F 41.0; F 41.2; F 42; F 45.0);
- adaptation disorder (F 43.2);
- pseudoneurotic disorder (F 33; F 60; F 60.2; G 4.1 и G 40.2).

A clinical characterization of patients of the experimental group is submitted in table 2.

Group and syndrome-complexes	Number of test persons (N)	Duration of illness (years)		
Neurotic disorder	83	1.96±0,68		
Phobic anxiety disorders (F 40)	13			
Mixed anxiety and depression disorder (F 41.2)	59			
Somatoform disorder (F 45.0)	3			
Panic disorder (F 41.0)	2			
Obsessive and compulsive disorder (F 42)	6			
Adaptation disorder (F 43.2)	84	2.17±0.77		
Pseudoneurotic disorder	34	2.8±1.56		
Dissociative disorder of organic etiology (F 60.2)	6			
Specific personality disorder (F 60)	7	_		
Recurrent depressive disorder (F 33)	9			
Epilepsy* (G 4.1 и G 40.2)	12			
Total	201	2.19±0.96		

\* Some patients with severe neurotic symptoms subsequently received a TLE diagnosis without marked personality changes.

All patients have been treated in medical facilities - neurosis clinics, mental health facilities, ambulatory treatment at a clinical psychotherapist. Duration of the disease (manifestations of clinical symptoms) all patients did not exceed 4 years. Clinical diagnostic was conducted by clinicians according to the general approach in diagnostics of neurotic disorders developed by V.N. Myasishchev, his students and followers. In connection with the objectives of the research, the experimental sampling was divided into three groups: patients with a neurotic disorder, patients with an adaptation disorder and patients with a pseudoneurotic disorder. Such a division is based on ICD-10 criteria, and to some extent complies with Myasishchev's views on various combinations of personality distinctions and psycho-traumatic situation in aetiopathogenesis of different neurotic disorders. In the neurotic condition, the manifestation of personality dysfunctions comes to the fore, and in a neurotic reaction, the expression of a psycho-traumatic situation takes center stage. The third group with pseudoneurotic disorders is a mixed group, and represents non-psychotic psychic disorders, called earlier borderline neurotic disorders, in which patients have had pseudoneurotic symptomatology, meaning that it resembled a neurotic symptomatology clinically, but differed from it by its main ethiopathogenetic mechanisms. We suppose that neurotic personality features will appear the least in this category.

Healthy test persons form the control group. The criteria for this group was absence of diagnosis, and appeal to a psychiatrist, neuropsychiatrist or psychotherapist (appeal to a psychologist was not considered an exclusion criterion).

## **RESEARCH METHODS**

The clinico-psychological method is presented by the "Social frustration level" (SFL) medical social scoring system [30]. The experimental psychological method is formed by the following psychodiagnostic methodologies:

- Neurotic Personality Questionnaire KON-2006 (KON-2006) [31];
- 2. Neurotic Personality Features method [32];
- Method to study psychopathologic symptomatology Symptoms Check List 90 (SCL-90) [33, 34];
- 4. Method to study intrapersonal conflicts [35];
- 5. Neurotisation level (NL) method [36].

Mathematic and statistic data processing include the following: the factor analysis by the method of main components and method of highest likelihood, single-factor analysis, multidimensional multi-factor dispersion analysis, multiple regression analysis, cluster analysis.

# Neurotic Personality Questionnaire KON-2006 validation adaptation and verification

The adaptation of the method in Russia was conducted from 2007 to 2013. During the adaptation process of the questionnaire, two independent translators did a double translation, after which the Russian version of the method was prepared (a title page, an instruction for test persons, stimulus material, an application form for answers). Keys, configuration of scoring systems and result processing procedure were translated and described.

The next stage consisted in gathering the material in clinical bases in different Russian cities: Saint Petersburg, Arkhangelsk and Chelyabinsk.

The verification of validation of the methodology was executed in two ways. Convergent validation was checked by calculating the correlation Pearson's ratio between parameters in the scoring systems of KON-2006 questionnaire, and methodologies from Symptoms Check List-90; then -SCL-90 [34] and the Level of neurotisation; then -NL [30]. Most scoring systems of KON-2006 questionnaire and X-KON general parameter indicating the total volume of personality dysfunctions, reveal highly significant correlations (p<0.01) with the neurotisation level parameter (NL methodology) and scoring systems and general indexes of SCL-90 methodology, which allows considering KON-2006 questionnaire as a tool describing personality characteristics of a neurotic pattern.

To check the construct validation correlation analysis of KON-2006, a scoring system is used with parameters from the methodology of Per-

Archives of Psychiatry and Psychotherapy, 2019; 1: 74-86

sonality Neurotic Features – and then PNF [32]. It has been found that KON-2006 scoring system has significant correlation with the scoring system of PNF methodology (p<0.01 and p<0.05). These correlations confirm that personality features represented in KON-2006 questionnaire definitely describe neurotic personality traits.

Table 3 shows parameters of X-KON correlation ratio with parameters of SCL-90 methodology (symptom questionnaire), PNF (personality neurotic features), NL (neurotisation level).

Table 3. Meaning of correlation ratios (r) of NeuroticPersonality Questionnaire KON-2006 (X-KON) generalparameter and parameters of methodologies to assessexpression of neurotic traits, neurotisation level and neuroticregister symptomatology (PNC, NL, SCL-90).

Parameters of methodologies of PNC, NL, SCL-90	r
Insecurity	0.537**
Affective span	0.290**
Introverted personality orientation	0.196**
Social non-adaptation	0.411**
Feigning	0.266**
Neurotisation level	0.343**
Somatoform disorder	0.228**
Obsession-compulsivity	0.188**
Interpersonal sensitivity	0.216**
Depressiveness	0.187**
Anxiety	0.229**
Phobic anxiety	0.157*
"Paranoid" cogitation	0.129*
Psychotism	0.130*
Additional points	0.159*
Symptom expression index	0.298**
Distress expression index	0.249**

<sup>\* –</sup> p≤0.05; \*\* – p≤0.01

#### KON-2006 Questionnaire diagnostic capabilities

The results of the experimental study given below demonstrate the diagnostic possibilities of the Neurotic Personality Questionnaire KON-2006.

Results of the comparative study of personality neurotic traits by means of the Neurotic Personality Questionnaire KON-2006 have been an78

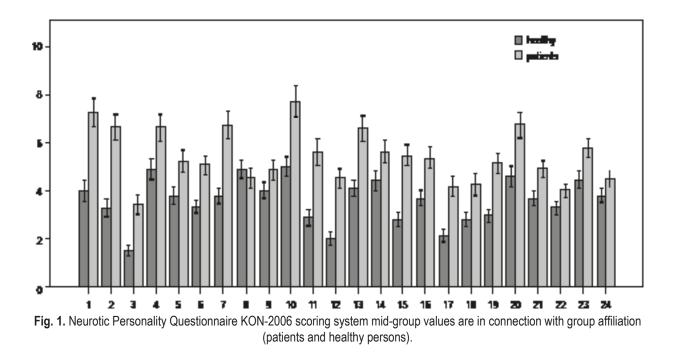
alyzed in a multivariate multifactor dispersion way to identify the "Group" factor effect (patient and healthy person group affiliation). The results are presented in the table 4.

 Table 4. The results of the multivariate multifactor dispersion analysis of Neurotic Personality Questionnaire KON-2006 parameters in connection with group affiliation (patients and healthy persons).

Substantive factors	Wilk's Lambda value	F	Freedom degree	Freedom degree mistake	р
Group	0.549	12.9	25.0	395.0	0.001

The results of the multivariate multifactor dispersion analysis demonstrate that the "Group" factor significantly influences the dispersion of all parameters, which points to the fact that neurotic personality traits depend on the presence or absence of a clinically approved neurotic disorder.

**Figure 1** represents mid-values of KON-2006 Questionnaire scoring system in groups of pa-



tients with neurotic disorders and healthy persons.

On the horizontal plane of the questionnaire scoring system are the following: 1 – Feeling of dependency on the environment, 2 – Asthenia, 3 – Low self-esteem, 4 – Impulsivity, 5 – Difficulties in decision making, 6 – Feeling of isolation, 7 – Demobilization, 8 – Risky behavior, 9 – Complex emotional relationships, 10 – Fatigue, 11 – Feeling of helplessness, 12 – Feeling of lack of influence, 13 – Low motivation, 14 – Predisposition to dreams, fantasies (escapism), 15 – Guilt, 16 – Problems in human relationships, 17 – Envy, 18 – Narcissism, 19 – Feeling of insecurity, 20 – Exaltation of behavior, 21 – Irrationality, 22 – Pedantry, 23 – Reflexivity, 24 – Feeling of emotional and physical overload. On the vertical plane are mid-group values of scoring systems.

Results of the study point that patients with neurotic disorders significantly differ from the group of healthy persons under the general parameter of neurotic personality traits, designating the scope of personality dysfunctions (patients – 29.01±1.25; healthy persons – 8.55±0.48 at p≤0.001) and under 23 parameters out of 24 scoring systems of the questionnaire KON-2006 (excluding "Risky behavior" scoring system). Patients with neurotic disorders are characterized by a greater manifestation of traits such as: feeling of dependency on the environment, asthenia, low selfesteem, impulsion, difficulties in decision making, feeling of isolation, demobilization, complex

emotional relationships, fatigue, feeling of helplessness, feeling of lack of influence, low motivation, escapism, guilt, problems in human relationships, envy, narcissism, feeling of insecurity, exaltation of behaviour, irrationality, pedantry, reflexivity, feeling of emotional and physical overload.

In order to assess the diagnostic possibilities, it is reasonable to compare the results of the research using Neurotic Personality Questionnaire KON-2006 with the results of other psychological techniques directed to indicate neurotic personality features and neurotisation level.

The results of the study performed with the "Neurotic Personality Features" (NPF) have also been subjected to a multivariate multifactor dispersion analysis. The "Group" factor impacts on four out of seven personal scoring systems of the methodology. Patients with neurotic disorders in comparison with healthy test persons are characterized with greater manifestation of traits such as self-doubt, cognitive and social inactivity, introvert direction of personality, social non-adaptability. Significant differences haven't been identified under scoring systems of "Affective instability", "Neurotic ultra-supervision of behaviour" and "Hypochondria". It is worth noting that, the presence of neurotic personality traits, both in the patients group, and in the health group, does not exceed the "low level", which indicates an insignificant expression of personality traits potentially associated with the risk of development of neurotic reactions and states, and neurotic personality changes [29].

The analysis of study results on the neurotic level with the use of NL methodology and a conducted single-factor dispersion analysis, indicate statistically proved differences between groups of patients with neurotic disorders and healthy persons. The latter are characterized by low neurotisation level, which proves emotional stability, positive background of feelings, self-esteem, social confidence and resistance to stress connected to these features. However, it should be emphasized that, if in the group of healthy persons the neurotisation parameter is in low ratios, in the group of patients it can be located in the area of indefinite values. The method's parameter, differentiating the groups, does not however properly verify a clinical diagnosis.

Thus, the comparative analysis of the study's results using three methods, directed to the in-

Archives of Psychiatry and Psychotherapy, 2019; 1: 74-86

dication of neurotic personality traits and neurotisation level demonstrates that KON-2006 questionnaire effectively distinguishes the clinical group, describes a wide range of personality traits (personality dysfunctions) inherent of patients with neurotic disorders, detects their high expression and indicates unidirectional gender differences. The NPF and NL methods, also distinguish groups of patients and healthy persons, but they do not fix a high level of presence of neurotic personality traits in patients and therefore, do not verify the clinical diagnosis on the psychological level.

X-KON has a great value for psychological diagnostic, since it is an integrated parameter of expression of 24 scoring systems of the KON-2006 method. The research establishes that the "Group" factor significantly influences the dispersion of the X-KON parameter, which indicates influence of the clinical diagnosis on the integrated parameter of expression of personality dysfunctions.

From the point of view of diagnostic possibilities of the X-KON method, integrative parameters are of interest in groups of patients with different types of neurotic disorders. For this purpose, an experimental group of patients with neurotic disorders was divided into three subgroups: a neurotic disorder, an adaptation disorder and a pseudo-neurotic disorder.

Figure 2 represents mid-values of X-KON parameters in three diagnostic groups.

On horizontal line – diagnostic group affiliation. On vertical line – estimated marginal mid parameters.

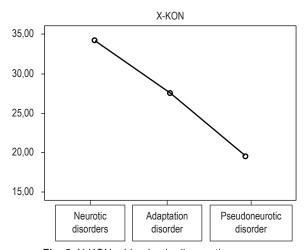


Fig. 2. X-KON mid-value in diagnostic groups.

Figure 2 demonstrates that the highest parameter has been detected in the group of patients with neurotic disorders. For comparison, the values of X-KON for the control and experimental groups:  $8.55 \pm 7.23$  for healthy individuals and  $29.01 \pm 17.84$  for patients. Patients with adaptation disorder have distinctly lower indicators, and the group of pseudoneurotic disorder has distinctly the lowest indicator. This result is extremely important not only because of the differentiation of diagnostic groups, but also because it confirms a range of theses advanced by V.N. Myasishchev. According to him, a neurotic disorder is characterized by a psychogenic character – a psychological connection between a situation, a personality and a disease. In other words, an existing life situation becomes subjectively irrepressible due to particular personal traits or personal dysfunctions, to which the situation suits like "a key to a lock" [1]. The neurotic status and neurotic reaction (currently corresponding to the categories of "neurotic disorder" and "adaptation disorder") are characterized, in the aetiopathogenesis of a disease, by a different specific weight of the objective heftiness of the psycho-traumatic situation and the scope and expression of personality dysfunctions. At the neurotic status (neurotic disorder) personality traits and personality dysfunctions that transform even common a life situation into a subjectively irrepressible one, dominate; and at the neurotic reaction (adaptation disorder) the objective complexity of the situation comes to the fore, in comparison to a significantly lower expression of personality dysfunctions. The results of our research show that X-KON indicator properly differentiate groups, detecting the greatest scope of intensity of personality dysfunctions at a neurotic disorder, which is definitely less expressed at adaptation disorders, and least of all expressed in the group of pseudo-neurotic disorders where the symptomatology is only similar to a neurotic one, but the etiology differs from neurotic disorders.

# Identification of personality traits, with the strongest connection to clinically validated neurotic disorders

To indicate personality characteristics detecting the strongest connection with clinically validated neurotic disorders a factor analysis (method of maximum plausibility) and a multivariate multi-factor dispersion analysis have been conducted. As a result, the following factors have been detected. "Psychic weakness" includes parameters such as feeling of dependency on the environment (with a factor weight of 0.85), asthenia (0.7), demobilization (0.7), low self-esteem (0.6), fatigue(0.6), impulsivity (0.55), difficulty in decision-making (0.4), feeling of helplessness (0.84), feeling of lack of impact (0.6), low motivation (0.74), guilt (0.6), feeling of danger (0.5); "Cognitive and emotional rigidity" includes exalted behaviour (0.6), irrationality (0.6), pedantry (0.5), reflexivity (0.6), feeling of emotional and physical overload (0.45); "Social non-adaptiveness" includes feeling of isolation (0.4), complex emotional relationships (0.6), problems in interpersonal relationships (0.6), "Narcissism" – narcissism (0.7), envy (0.6) and "Escapism" – a predisposition to dreaming (0.4), risky behavior (0.7).

The conducted multivariate, multi-factor dispersion analysis permits to detect patterns of personality traits characteristic to patients with different categories of neurotic disorders (neurotic disorder, adaptation disorder, pseudoneurotic disorder are independent variables) and healthy persons. The above mentioned five factors constitute the dependent variables. As a result, it has been identified that (Fig. 3) the "Social non-adaptability" pattern is more relevant to patients with neurotic disorder and adaptation disorder (0.05±0.85 и 0.14±0.76 for p≤0.007); the "Psychic weakness" pattern is relevant for patients with a pseudoneurotic disorder (0.4±1.15 for p≤0.041); the "Cognitive and emotional rigidity" is relevant for healthy persons (0.12±0.8 для p≤0.033). Two patterns – "Narcissism" and

Social non-adaptability	neurotic disorder     adaptation disorder	
Psychic weakness	pseudoneurotic disorder	
r sychic weakness	• pseudoneurolic disorder	
Cognitive and enotional rigidity	healthy persons	

Fig. 3. Personality traits (patterns) related to neurotic disorders (results of the dispersion analysis).

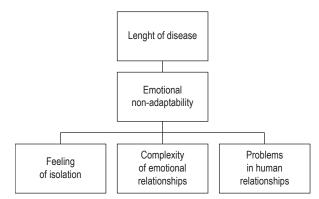


Fig. 4. Personality pattern influence on duration of a disease (results of multivariate regressive analysis).

"Escapism" – do not identify specificity of the groups.

A multiple regressive analysis has been conducted allowing to detect a connection between the duration of a disease and the five factor parameters identified earlier. It states that the greatest impact on the duration of disease is made by "Social non-adaptability" factor (0.183 at p≤0.01) (pic.4). It might be supposed that personality traits belonging to the "Social non-adaptability" factor are predictors of chronic neurotic disorders.

Factor (method of main components) and cluster analyses have been conducted and have been used to identify "personality types" (clusters) characteristic to patients with neurotic disorders. The legitimacy of the repeated use of the factor analysis is explained by the need to identify the uncorrelated variables (factors) obtained with KON-2006, and represents the step preceding the cluster analysis.

The factor analysis of the main component method allows to distinguish four factors: "Low activity" including fatigue (with factor weight 0.94), asthenia (0.84), demobilization (0.75), problems in human relationships (0.7), feeling of helplessness (0.7), exalted behavior (0.6), guilt (0.6), difficulties in decision making (0.5), feeling of isolation (0.5), feeling of lack of influence (0.44)); "Social weakness" includes feeling of danger (0.85), low self-esteem (0.8), low motivation (0.75), envy (0.75), feeling of dependency on the environment of surround (0.7), irrationality (0.45); "Hysteria" includes risk behavior (0.85), escapism (0.7), narcissism (0.7), impulsivity (0.6)) and "Cognitive weakness" includes feeling of emotional and

physical overload (0.8), pedantry (0.8), reflexivity (0.7).

To identify personality types represented in the studied sampling on the basis of personality factors described earlier, a cluster analysis has been performed. With the use of the k-means technique, four clusters of respondents have been singled out, representing groups with similar profiles of expression of personality factors – four personality types. Every cluster includes some personality factors with different degrees of expression. Average values of factors are represented in the following rank scoring system: from – 2.0 to 0.0 is low expression; from 0.0 to 1.0 is average expression; from 1.0 to 2.0 is high expression.

As a result of the analysis, it has been established that every cluster is designated by different combination of factors with various degrees of expression. Thus, cluster 1 "Moderate fatigue" includes Hysteria, Social weakness, Low activity (for all factors it is designated average value expression) and Cognitive weakness (low expression); cluster 2 "Unsociability" – Low activity, Cognitive weakness (average expression), Hysteria (low expression); cluster 3 "Social nonadaptability" includes Social weakness, Hysteria (both are average expression), Low activity, Cognitive weakness (both are low expression); cluster 4 "Cognitive weakness" - Low activity (high expression), Hysteria, Cognitive weakness, Social weakness (all are of average expression). The greatest part of sampling forms cluster "Social non-adaptability" (43.8%), and the lowest part is cluster "Cognitive weakness" (12.4%).

Figure 5 shows percentage ratio of personality types in diagnostic groups and groups of healthy persons.

Figure 5 demonstrates that diagnostic groups and group of healthy persons are characterized by a different representation of personality types. For patients with neurotic disorder, four personality types are common, and are represented by the following clusters: Moderate fatigue (30.36%), Social non-adaptability (22.73%), Cognitive weakness (20%), Unsociability (18.75%); for patients with adaptation disorder there are 4 types: Unsociability (37.5%), Cognitive weakness (28%), Social non-adaptability (26.14%), Moderate fatigue (21.43%); for patients with pseudoneurotic disorder there are 3

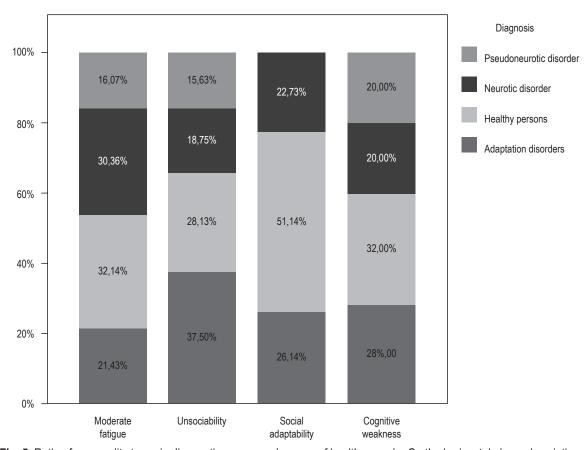


Fig. 5. Ratio of personality types in diagnostic groups and groups of healthy people. On the horizontal plane, description of clusters. On the vertical plane the relative number of patients and healthy people, in percentage.

types: Cognitive weakness (20%), Moderate fatigue (16.07%), Unsociability (15.63%); the group of healthy persons is common with four types: Social non-adaptability (51.14%), Moderate fatigue (32.14%), Cognitive weakness (32%), Unsociability (28.13%) (see pic.5).

Thus, we might suppose that the least foreseen unfavourable is "Social non-adaptability" cluster where 51.4% of respondents belong to the group of healthy persons and there aren't any patients with a pseudoneurotic disorder. The most foreseen unfavorable for an adaptation disorder is affiliation to "Unsociability" cluster (37.5%); for a neurotic disorder it is to "Moderate weakness" cluster (30.36%); for pseudoneurotic disorder it is to "Cognitive weakness" cluster (20%).

# DISCUSSION

The comparative analysis of personality features with neurotic disorders and healthy test persons has been conducted on the basis of results of the research by means of three methods directed to study neurotic personality features: "Neurotic Personality Questionnaire KON-2006", questionnaire "Neurotic Personality Features" (NPH) and "Neurotisation level" (NL).

Patients with neurotic disorders are characterized by a large scope and a wide range of personality dysfunctions with a high degree of expression of almost all neurotic personality traits. Obvious differences have been detected among patients with neurotic disorders and healthy persons with 23 out of 24 scoring systems from the Neurotic Personality Questionnaire KON-2006, and also under the general parameter of expression (scope) of personality dysfunctions. The achieved results confirm that the Neurotic Personality Questionnaire KON-2006 in a Russian sampling differentiates the clinical group from the group of healthy persons, detecting differences under almost all parameters, describes a wide range of personality traits (personality dysfunctions) proper to patients with neurotic disorders and identifies their high degree expression.

The eexpression of neurotic personality traits under the results of NPH technique of patients and healthy persons albeit detects actual differences on 4 out of 7 scoring systems, is within the range of variables, which doesn't allow to properly differentiatee the selection. In turn, the analysis of study of the neurotisation level (NL) demonstrates the statistically proper differences among patients with neurotic disorders and healthy persons. The latter have lower neurotisation level than patients, which indicates emotional stability, positive background of feelings, feeling of self-esteem, social confidence and related to these features, a resistance to stress.

Thus, the comparative analysis of the results of the research using three techniques directed to detect neurotic personality features and neurotisation level has demonstrated that the questionnaire KON-2006 accurately differentiates the clinical group, describes a wide range of personality traits (personal dysfunctions) characteristic to patients with neurotic disorders, diagnosticates their high degree of expression, and indicates unidirectional gender differences. NPF and NL methods distinguish groups of patients and healthy people, but do not fix the high level of expression of neurotic personality traits of patients, and consequently do not verify distinctly a clinical diagnosis on the psychological level.

The constructed five-factor paradigm of features of neurotic personality (personality dysfunctions) by means of maximum probability detects connection with clinically accepted neurotic disorders and includes factors detecting significant interactions with studied clinical and psychological characteristics: the "Psychological weakness" factor goes with an expression of intrapsychological conflicts, self-distrust and distress level; "Cognitive and emotional rigidity" is with unsociability, "Social non-adaptability" is with expression of intrapsychological conflicts and introversions; "Narcissism" is with striving for acknowledgement, with need to prove oneself and "paranoid mentality", "Escapism" is with maniac ability and striving for social approval. The greatest influence on the duration of the disease is made by the "Social non-adaptability" (positive interaction) and "Escapism" (negative interaction) factors.

The four-factor paradigm of neurotic personality traits (method of main components) which

Archives of Psychiatry and Psychotherapy, 2019; 1: 74-86

includes factors of "Low activity", "Social weakness", "Hysteria", "Cognitive weakness", and the conducted on its basis cluster analysis allowed to single out four main "personality types" (clusters): "Moderate fatigue", "Unsociability", "Social non-adaptability", "Cognitive weakness". For different types of neurotic disorders the most relevant clusters have been detected that might be considered as foreseen unfavorable personality types: for adaptation disorder it is the "Unsociability" cluster, for neurotic disorder it is the "Moderate fatigue" cluster, for pseudoneurotic disorder it is the"Cognitive weakness" cluster. The least foreseen unfavorable aspect for the progress of neurotic disorders is the "Social non-adaptability" cluster, where 51.4% of respondents belong to the norm group, and there aren't any patients with pseudoneurotic disorder at all.

The main principle of positive diagnostic of neurotic disorders is detection of a realized conceptual connection between a situation, a personality and a disease, which suggests a study and analysis of personality traits (personal dysfunctions) that transform a complex, but typical enough, life situation into a subjectively unsolvable and psycho-traumatic one. Adapted within the frames of the research, the new "Neurotic Personality Questionnaire KON-2006" method provides information about a wide range of characteristics and a quantitative parameter determining the common volume of personality dysfunctions. Thus, the methodology allows receiving both qualitative and quantitative characteristics of personality traits interrelated with disorders and probably predisposing their progress. The marked in the current research, more common patterns of neurotic personality traits, analyzed in relation to different types of neurotic disorders (a neurotic disorder, an adaptation disorder, a pseudoneurotic disorder) can be used as well in differential diagnostics of these disorders.

## CONCLUSION

The unique status of neurosis as a disease in which aethiopathogenesis psychological factors play the leading role has remained a relevant topic of scientific research. Prevalence and susceptibility of this disease to be influenced by social, economic and cultural changes in the world, the presence of clinical pathomorphism of neurosis, force clinicians and psychologists to turn again and again, to the psychological aspects of neurotic disorders.

Psychological research in neurotic disorders clinics covers the widest range of phenomena: system of relationships, meanings, personal guidelines, protection mechanisms, copingbehavior, psychological conflicts etc. It is also extremely important to study personality traits and more common patterns of the neurotic personality, that prevent a constructive resolve of complex situations and internal conflicts, rendering them subjectively unsolvable. Research presents descriptions of such personality patterns characteristic to main forms of neurosis (hysteria, neurasthenia, neurosis of compulsive conditions). At present however, during diagnostic of neurotic disorders related to clinic pathomophism of neurosis, these categories are not practically used, which significantly makes it difficult to understand the content of the psychological component in aethiopathogenesis of neurotic disorders in contemporary conditions. Therefore the study of personal traits characteristic of a neurotic personality (personality dysfunctions), the analysis of their content, and the determination of the degree of their expression is a relevant task.

Our research has confirmed the data presented in the literature, which affirms that the personality of a patient with neurotic disorders is characterized by a wide range and scope of personality dysfunctions. The present research has identified personality characteristics, which have the strongest connection with clinically validated neurotic disorders, and also influence the duration of neurotic diseases.

The research also allowed to unravel patterns of personality traits mostly characteristic to patients with different types of neurotic disorders (neurotic disorder, adaptation disorder, pseudoneurotic disorder) and to healthy people. Personality patterns (personality types), in the highest degree relevant to healthy people, as well as patterns of foreseen unfavourables in relation to different kinds of neurotic disorders, have been detected.

Within the frames of the current research, a psychodiagnostic complex has also been de-

veloped, which includes methods for studying the level and structure of symptomatology of the neurotic register, social frustration, intrapersonal conflicts and personal dysfunctions. The conducted research confirms the expediency of the complex to study the most significant clinical psychological and individual psychological characteristics of patients with neurotic disorders and its use in psychological diagnostic and formation of differentiate targets for psychotherapeutic influence. The central method of the developed methodical complex is the "Neurotic Personality Questionnaire KON-2006" method. Within the scope of the research this questionnaire has been successfully adapted to a Russian selection, verification of reliability and validations of the method have been executed. The analysis of the results of validation demonstrates that the expression of neurotic personality traits described in the questionnaire KON-2006 is associated with the severity of the psychopathological symptomatology and personality traits described in the questionnaire KON-2006 are neurotic. The questionnaire was demonstrated on the Russian sampling, and provided results that allow the recommendation of the "Neurotic Personality Questionnaire KON-2006" as a reliable tool for diagnostics of neurotic personality traits in clinics. The possibility to measure the expression of a wide range of personality characteristics of a neurotic register, and to determine the total volume of personality dysfunctions can improve positive diagnostics in clinics of neurosis, providing fuller information on personality traits, which impead constructive processing of intrapersonal conflicts and the overcoming of psychotraumatic situations.

The research was carried out with the financial support of the Russian Foundation for Basic Research, the project "Development of Measuring Tools for Diagnosing the Severity of Neurotic Personality Traits" No. 17-06-00956.

# REFERENCES

- Myasishchev V.N. Personality and neurosis, monograph, Psychoneurological Institute. V.M. Bekhtereva, Leningrad: LSU Publishing House, 1960. p. 428.
- Karvasarsky B.D. Neurosis 1st ed., Pererab. and add. M.: Medicine, 1980, p. 576.
- 3. Karvasarsky BD, Medical psychology, L .: 1982, p 271.

- Svyadosch A.M. Neuroses 3rd ed., Pererab. And add. M.: Medicine, 1976, p. 272.
- Aleksandrovsky Yu.A. Mental disadaptation states and their compensation (borderline neuropsychiatric disorders) In: Yu.A. Alexandrovsky. M.: Science, p. 272, 1976.
- Jakubik A. Osobowość histeryczna [Hysterical personality]. Psychoterapia; 27, 1978: 21-32.
- Kępiński A. Psychopatologia nerwic. Krakow: Literary Press; 2002.
- Jakubik A., Masłowski, J., Kępiński A. Człowiek i dzieło. Warszawa: PZWL, 1981, p. 427.
- Aleksandrowicz J.: Nerwice: psychopatologia i psychoterapia. – Warszawa: Państ. Zakł. Wydaw. Lekarskich, 1988, p. 288.
- Aleksandrowicz J.: Zaburzenia nerwicowe zaburzenia osobowości i zachowania dorosłych (według ICD-10): psychopatologia: diagnostyka, leczenie. Wyd. 3 popr. i zmien. – Kraków: Wydaw. Uniw. Jagiellońskiego, 2002. p. 276.
- Aleksandrowicz J., Psychopatologia zaburzeń nerwicowych i osobowości, Wydawnictwo Uniwersytetu Jagiellońskiego, 2002, p. 276.
- Tarabrina N.V. Experimental psychological study of the states of frustration and emotional stress during neurosis. Diss.. Cand. Psychol. Sciences. L., 1973, p. 223.
- Tarabrina N.V., Methods for Studying Frustration Reactions (Picture-FrustrationStudy, S / Rosenzweig) / Journal of Foreign Psychology. 1994; 2 (4): 68-77.
- Savenko, Y.S. The diagnostic value of the Rorschach method. Psychological problems of psycho-igens, psychoprophylaxis and medical deontology. L., 1976.
- Savenko, Y.S. Projective methods in the study of the unconscious. Unconscious: nature, functions, methods of research. Tbilisi., 1979; 3: 632-637.
- Burlachuk L.F. The study of personality in clinical psychology. Kiev; 1979. p. 176.
- Bakirova G.Kh., Kazilke H., et al. Clinical and psychological methods of BVNK – 300 and the experience of its use for solving diagnostic problems in neuroses. Psychological diagnostics in neuropsychiatric and psychosomatic diseases. L.1985, p. 484.
- Golynkina E.A., Isurina G.L. The dynamics of the socio-psychological characteristics of patients with neuroses in the process of psychotherapy. Diss.. Cand. psychol. sciences. – SPb. 1992, p. 253.
- Isaeva E.R., Isurina G.L., Kaidanovska E.V. et al. Study of coping behavior in patients with low-grade schizophrenia and neurosis. Review of Psychiatry and Medical Psychology. VM Bekhtereva. 1995; 3-4: 98-101.
- Vasserman, L.I., Vuks, A.Ya., Iovlev, B.V. Scale for the psychological diagnosis of the level of neurotic asthenia. Guidelines. L., 1998, p. 20.

- Isurina G.L. Group dynamics in neuroses (methods, psychological mechanisms of therapeutic action, dynamics of individual psychological characteristics). Abstract of Diss.. Cand. psychol. Sciences. L., 1984, p. 25.
- Tsvetkov G.N. Features of social-perceptual processes in the dynamics of group psychotherapy. Social and psychological problems of rehabilitation of neuropsychiatric patients. L., 1984, p. 127-131.
- Eresko D. B., Isurina G.L. and others. Alexithymia and methods for its determination in borderline psychosomatic disorders. Guidelines. – S.-PB.: Neuropsychiatric Institute. V.M. Bekhtereva, 1994.
- Obidin I.Y. Clinical and psychological characteristics of the pathomorphosis of hysterical disorders: during the period of socio-economic changes in Russia: dissertation author's abstract for the degree of candidate of psychological sciences: 19.00.04 I. Y. Obidin; St. Petersburg, 2007. p 19.
- Chehlaty E.I. Coping behavior in patients with neuroses, persons with preneurotic disorders and in social groups at increased risk of neuropsychiatric disorders. Abstract of dissertation for the degree of Doctor of Medicine. SPb .: 2007. 59 p. Specialty: 19.00.04 «Medical Psychology». 14.00.18 «Psychiatry».
- Kolotilshchikova Ye.A., Mizinova Ye.B. Comparative study of the locus of control in patients with neurotic disorders in the period of socio-economic changes in the country (1987-2009) // Bulletin of the Pyatigorsk State Linguistic University. 2010;. 2: 329-331.
- Aleksandrowicz J., Klasa K., Sobański J., Stolarska D. KON-2006 Kwestionariusz osobowości nerwicowej. Psychiatria Polska; 2007, 41 (6): 759–778.
- Aleksandrowicz J., Klasa K., Sobański J., Stolarska D. KON-2006 Neurotic Personality Questionare, Archives of Psychiatry and Psychotherapy. 2009; 1: 21–29.
- Veronika Ježková, Petra Matulová Pilot study of KON-2006 in the Czech Republic, Archives of Psychiatry and Psychotherapy. 2010; 3: 57–61.
- Vasserman, LI, Schelkova, O. Yu. Medical psychodiagnostics. Theory, practice and training – St. Petersburg: Faculty of Philology, St. Petersburg State University, 2004. p. 624.
- Aleksandrowicz J., Klasa K., Sobański J., Stolarska D. Kwestionariusz osobowości nerwicowej KON – 2006, Komitet Redakcyjno-Wydawniczy Polskiego Towarzystwa Psychiatrycznego, Biblioteka Psychoterapii Polskiej. Kraków, 2006, p. 72.
- Vasserman, L.I., Iolev, B.V., Schelkova, O.Yu., Chervinskaya, K.R. Psychological diagnosis of neurotic personality traits: medical recommendations, St. Petersburg: 2003, p. 520.
- Derogatis, L.R. How to use the system distress checklist (SCL-90) in clinical evaluations, psychiatric rating scale. In: Derogatis, R.L. Ed., Self-Report Rating Scale, Hoffmann-La Roche Inc, 1975, p. 22-36.

- 34. Tarabrina N.V. Workshop on the psychology of post-traumatic stress, St. Petersburg: Peter, 2001. p. 272.
- Kaydanovskaya E.V., Kumkova E.I., Murzenko V.A., Pokhoretskaya A., Fedorov A.P. Clinical and psychological criteria for the effectiveness of group psychotherapy for neuroses and methods for its determination. In: Clinical and psy-

chological studies of group psychotherapy for neuropsychiatric diseases. L, 1979, pp 84 – 90.

 Wasserman, LI, Schelkova, O. Yu. "Psychological diagnosis of disorders of the emotional sphere and personality: the Collective. monograph.", St. Petersburg: Scythia-print, 2014. p. 408.